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Supplementary information to:

Letter to the editor:

LESSONS FROM A GENOME-WIDE CRISPR-CAS9 SCREENING: WHAT RESEARCHERS SHOULD KNOW BEFORE START

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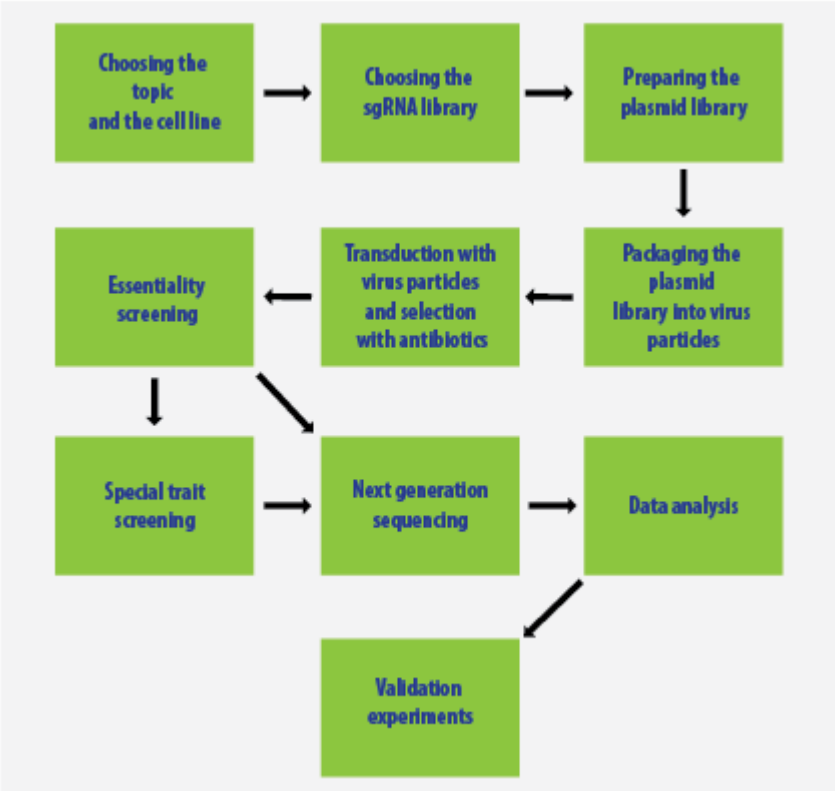

Supplementary Figure 1: Overview of a genome-scale CRISPR-Cas9 screening

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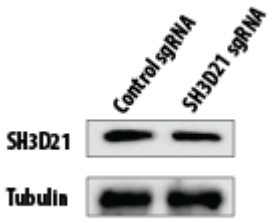

Supplementary Figure 2: Western blotting of SH3D21 protein in *SH3D21*-knockout cells. The amount of SH3D21 protein was assessed in *SH3D21*-knockout cells. As seen here the quantity of SH3D21 protein didn't show a dramatic decrease in knockout cells while the mutations on the *SH3D21* gene was confirmed by SURVEYOR assay (Masoudi et al., 2019).

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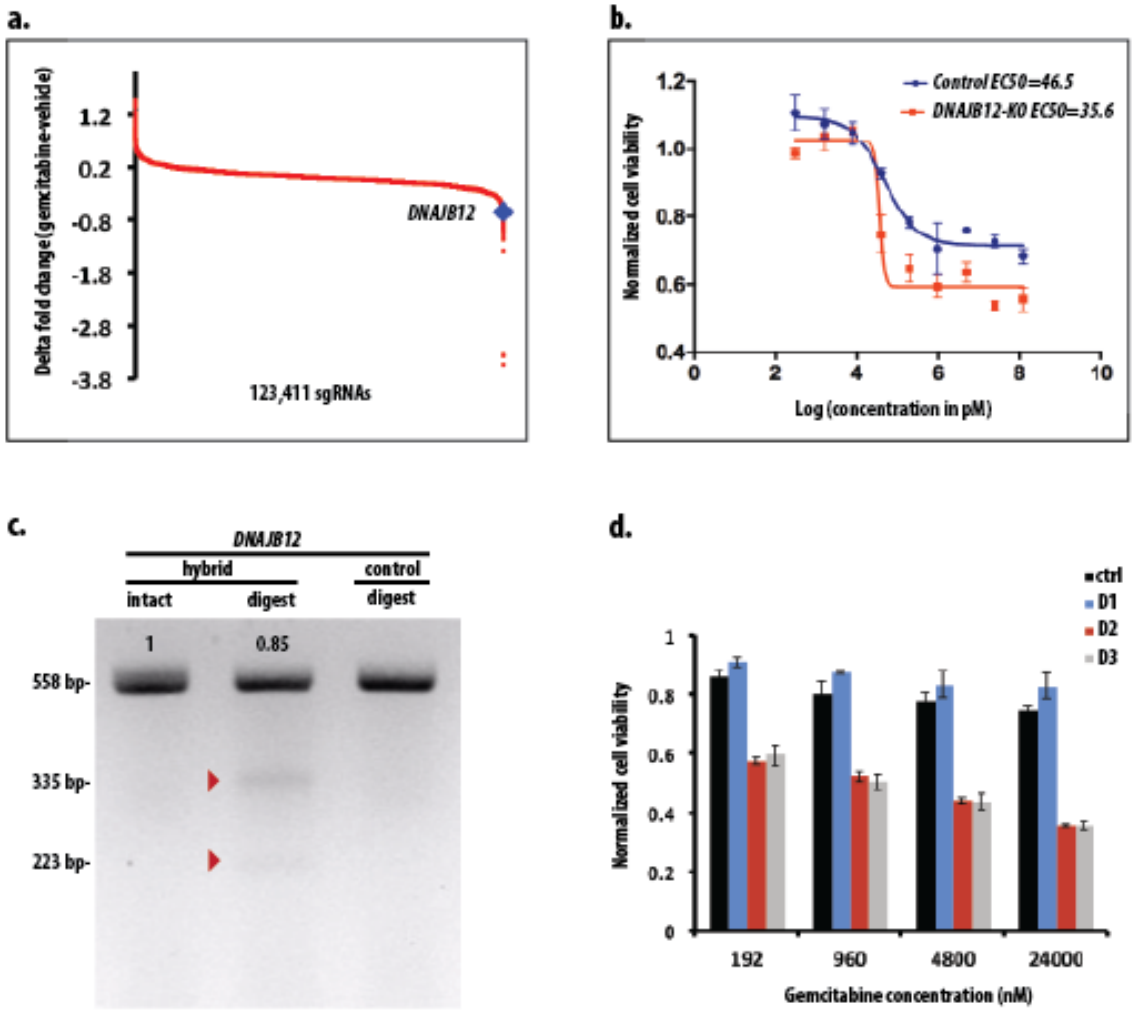

Supplementary Figure 3: *DNAJB12* as a gemcitabine sensitizer candidate. The gene *DNAJB12* appeared as one of the top hits in gemcitabine sensitizers list (Masoudi et al., 2019). **a**) Position of top two *DNAJB12* sgRNAs amoung the 123, 411 sgRNA of the library after treating the Panc1 cells with gemcitabine/vehicle. Note that the two sgRNAs are positioned in tandem, 175 and 176 among the ranked sgRNAs. **b**) *DNAJB12*-knockout cells were prepared and used for dose-response assay against gemcitabine. **c**) SURVEYOR assay confirmed indel mutations on the target site of the sgRNA on *DNAJB12* gene. **d**) The monoclonal *DNAJB12*-knockout cell lines were prepared and tested for sensitivity to gemcitabine.

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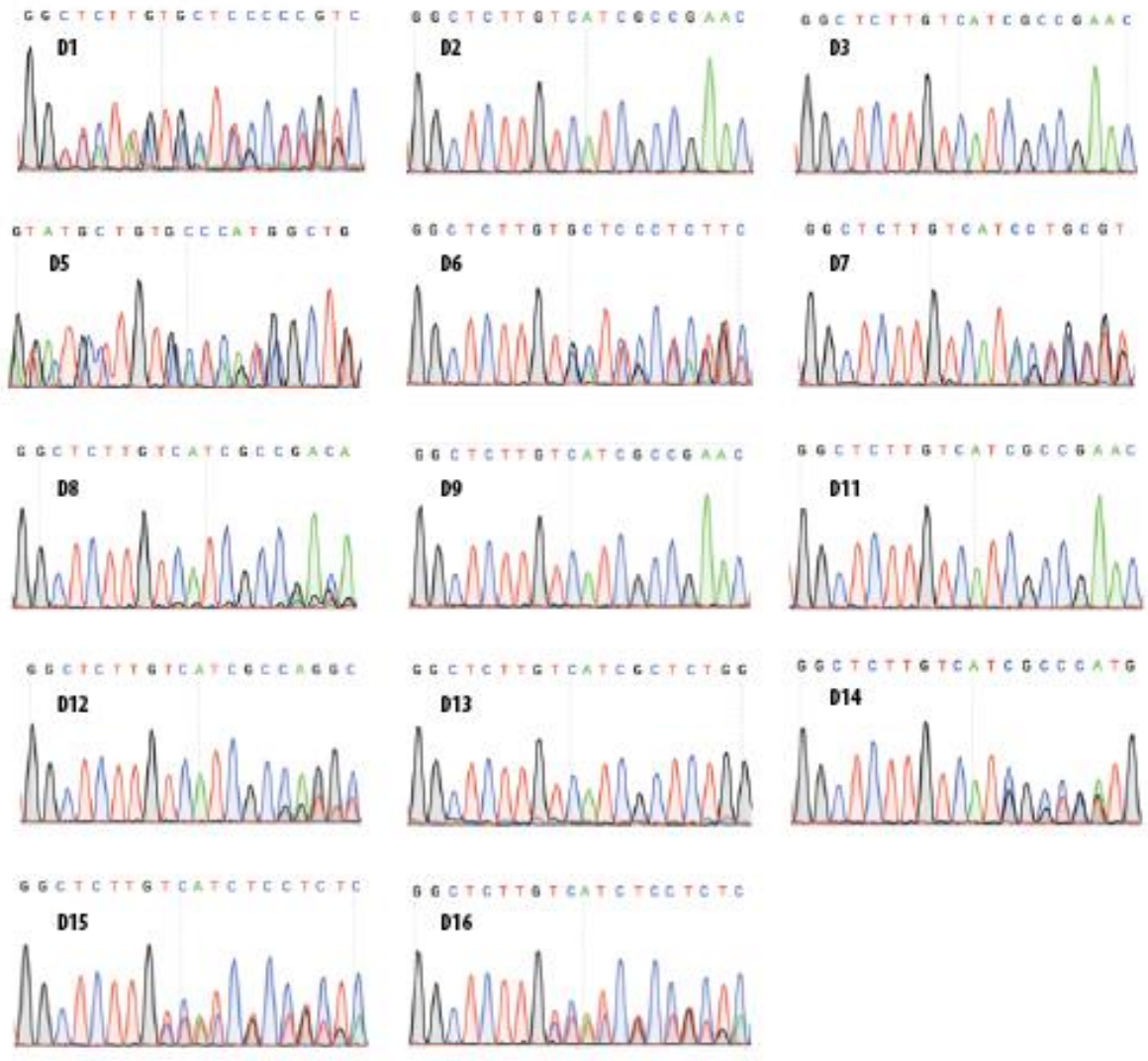

Supplementary Figure 4: The DNAJB12 sgRNA target site. Sanger DNA sequencing chromatogram of the DNAJB12 sgRNA target site on the genome of DNAJB12-knockout cell lines. Note that cell lines D2, D3 and D9, which showed a dramatic increase in sensitivity to gemcitabine compared to the control, have intact target sites.